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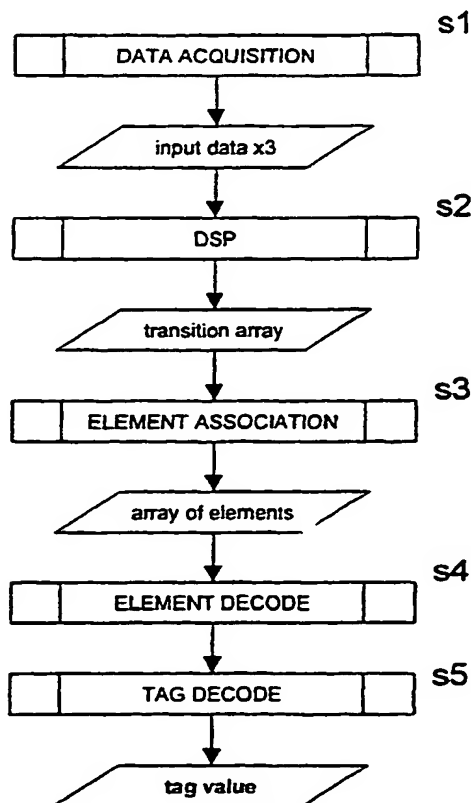
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(54) Title: **DETERMINING PROPERTIES OF MAGNETIC ELEMENTS**



(57) Abstract: A method of determining differing characteristics of magnetic dipole elements such as orientation, coercivity, bias and response amplitude and a tag reader for reading magnetic tags containing such elements. The elements are scanned by a rotating magnetic field and two sets of transition data are determined. The transition data sets are associated with respective elements and analysed to determine mean field values resolved along the element vectors. These field values are used to determine properties of the elements, such as coercivity.

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